

IN THE CLAIMS

Please amend the following claims.

1. (currently amended) A process comprising:
forming a metal ~~interconnect~~ structure having at least one via and at least one interconnect onto a substrate, said metal ~~interconnect~~ structure extending above a surface of ~~said the~~ substrate;
forming, subsequent to said forming said a metal ~~interconnect~~ structure, a carbon-doped oxide (CDO) layer with a first concentration of carbon dopants therein on said substrate and filling entirely between elements of said metal ~~interconnect~~ structure; and
continuing to form, subsequent to said forming said a CDO layer with said a first concentration of carbon dopants, said CDO layer further above said metal interconnect structure with a second concentration of carbon dopants therein, wherein said the first concentration is higher than said the second concentration.
2. (currently amended) The process according to Claim 1 further comprising:
forming, subsequent to said forming said second concentration of carbon dopants, ~~continuing to form~~, said the CDO layer further with a third concentration of carbon dopants therein, wherein there is a linear correlation of said the concentration of carbon dopants between said the first concentration, said the second concentration, and said the third concentration.
3. (currently amended) The process according to Claim 1 further comprising:
forming said the CDO layer further with a third concentration of carbon dopants therein, wherein said the first and third concentrations are higher than said the second concentration.
4. (currently amended) The process according to Claim 1 further comprising:
forming said the CDO layer further with a third concentration of carbon dopants therein, wherein said the first and third concentrations are lower than said the second concentration.
- 5-6. (cancelled)

7. (currently amended) A process comprising:
~~forming a carbon-doped oxide (CDO) layer with a concentration of carbon dopants therein;~~
~~wherein the concentration varies substantially linearly from a higher concentration in an initially deposited portion of the CDO layer to a lower concentration in a subsequently deposited portion of the CDO layer.~~
forming a first layer of carbon-doped oxide (CDO) on a substrate, said first layer of CDO having a first concentration of carbon dopants therein;
forming a second layer of CDO having a second concentration of carbon dopants therein above said first layer of CDO; and
forming a third layer of CDO having a third concentration of carbon dopants therein above said second layer of CDO, wherein said first concentration and said third concentration are higher than said second concentration.
- 8-9. (cancelled)
10. (currently amended) A process comprising: The process according to Claim 7
~~wherein the concentration varies between about 1 percent and about 20 percent by atomic mass.~~
forming a first layer of carbon-doped oxide (CDO) on a substrate, said first layer of CDO having a first concentration of carbon dopants therein;
forming a second layer of CDO having a second concentration of carbon dopants therein above said first layer of CDO; and
forming a third layer of CDO having a third concentration of carbon dopants therein above said second layer of CDO, wherein said first concentration and said third concentration are lower than said second concentration.
- 11-30. (cancelled)